APPENDIX C

MAINE TURNPIKE AUTHORITY PAPER

ON FUNDING OPTIONS

Maine Turnpike Authority

430 RIVERSIDE STREET
PORTLAND, MAINE 04103

Memorandum

To: The Governor's Capital Transportation Funding Working Group

From: Paul E. Violette, Executive Director, Maine Turnpike Authority

Re: Funding Options for Consideration

Date: January 5, 2006

The Maine Turnpike Authority is pleased to be a participant in the Governor's Capital Transportation Funding Working Group. In preparation for this discussion, Turnpike staff began by identifying the following criteria by which strategy options would be judged. We agreed that any recommendation we offered should:

- Generate funding to address the immediate and critical transportation needs of the state.
- Generate funding in a prudent, responsible fashion that will not simply exacerbate the problem for policy makers in a future biennium.
- Alleviate short term financial pressures so that the focus can be shifted to the development of long term structural funding solutions.

Once this criterion was established, Authority staff met with the Maine Turnpike Authority's investment bankers to flesh out various options available to address current and future state transportation funding shortfalls. This memo describes our findings and offers some recommendations for further thought.

Summary of Findings

If the Governor and the Legislature choose to address the funding shortfall facing Maine's transportation infrastructure there are three basic ways to go about it. The first would be to provide a significant additional allocation from the State's General Fund to the State's Transportation Fund. The second would be to increase the flow of revenue into the State's Transportation Fund by increasing the gas tax and/or various license and registration fees. And the third would be to generate additional funding through some method of bonding.

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Practical Assumptions

Given the state's current fiscal situation we can not assume that significant additional General Fund revenues will be forthcoming to solve the state's transportation funding shortfall, although such a transfer would be desirable. It is probably safe to assume that neither the Governor nor the Legislature would be supportive of increases in the gas tax or other existing transportation revenue sources. Even if they were of a mind to do so, these methods of revenue collection could not be implemented swiftly enough to have any meaningful impact on the immediate and serious problem confronting the State's transportation capital improvement program. This leads us to the third option, bonding.

A Case for Bonding

Having examined the State of Maine's position with respect to transportation related debt, we are convinced that a strategic program of bonding can meet all of the criteria listed above, and in fact, represents the most responsible and appropriate approach to the state transportation funding shortfall. As this memo will reflect, when compared to other states, Maine has been extremely conservative in the practice of borrowing to finance long-term transportation improvement projects. In light of the current shortfall, it seems most appropriate to consider whether Maine is taking full and wise advantage of its favorable position in the financial marketplace to improve the economic opportunities for its citizens. This is especially true if you subscribe to the philosophy that the costs of long term capital improvements should be shared by the many people who enjoy those improvements over at least a portion of the structure's lifespan. We believe that most Maine people embrace this philosophy (it is demonstrated repeatedly by their support of transportation bond issues) and that prudent financing opportunities are available.

Bonding Recommendation

A survey of various State Transportation Funding programs indicates that there are three primary bonding strategies; General Obligation Bonds, GARVEE Bonds and Conduit Issued Revenue Bonds. It became immediately clear that General Obligation Bonds would not meet the criteria we established. The time required to gain approval and issue a General Obligation Bond disqualifies it as a viable approach to address the shortfall before the end of the current fiscal year. In addition, Maine General Obligation Bonds have historically been issued to mature in just ten years. The debt repayment requirements of such a short-term issuance would do little to alleviate current cash flow problems and would only assure the continual re-emergence of the problem in future years.

The staff of the Maine Turnpike Authority recommends that the working group give further consideration to the additional use of GARVEE Bonds and/or new Conduit Issued Revenue Bonds, both of which could provide immediate and lasting benefits.

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GARVEE Bonds

Maine is familiar with GARVEE Bonds having recently issued (in late 2004) a GARVEE to fund portions of the Waldo Hancock Bridge Project. Currently, the use of additional GARVEE bonds is very limited by Maine Law and the issuance for the Waldo-Hancock Bridge had a maturity of just 11 years, resulting in a relatively steep and short-term repayment cycle, which may be contributing to current cash flow problems. In the future, the State may want to consider a longer term of 15 to 25 years, particularly if the capital asset has a useful lifespan of 50 years or so.

Conduit Issued Revenue Bonds

The New York Thruway is a leading conduit issuer. While the Thruway, like the Maine Turnpike, has its own toll revenue bond credit that is used to fund major toll highway capital needs, it also acts a conduit issuer for two non-toll bond programs. As a conduit issuer, the Thruway issues debt on behalf of the New York State Division of Budget and the New York Department of Transportation, using a dedicated stream of revenue provided by theses agencies for debt service payment. Using this model the Maine Turnpike Authority or the Maine Municipal Bond Bank could issue bonds on behalf of the Maine Department of Transportation should a non-toll revenue stream be dedicated for such purpose.

Trends

As the attached information indicates, more and more states are employing Highway User Revenue Bond strategies and lengthening final maturity dates on these bonds to 15-25 years. These states have deliberately embraced debt levels higher than Maine on all comparative ratios as prudent long term strategies for funding critical infrastructure needs. Even within the State of Maine, it is notable that the Maine Turnpike Authority currently pays approximately 25% of its annual operating revenue for debt service compared to the State of Maine, which allocates only 4-5% of its annual revenue to debt service payments (see table on page 5.) We believe these strategies could be helpful in structurally repairing the recurring cash flow shortages in Maine's transportation fund, while enhancing the important correlation between the financing of a project and its useful lifespan.

We believe that both additional GARVEE's and new Conduit Issued Revenue Bonds could provide the short term relief that is required prior to the end of the State's current fiscal year and without any impact to the State' AA General Obligation Bond rating. We anticipate that any new GARVEEs that extended their final term to 15-25 years would likely carry mid to low A category ratings. The Conduit Issued Revenue Bonds would likely carry a "mid to high A" rating, which would result in marginally lower issuance cost than the GARVEE Bonds.

Thank you for your consideration.

Funding of State Transportation Programs

From a macro perspective, States, State Departments of Transportation, and transportation agencies of the State typically fund their short and long-range State Transportation Improvement Plans (STIPs) and other related programs from a variety of revenue and capital funding sources. These include highway programs that range from those administered at the State-level to those funded more independently away from state control, or more at the local and regional level. A variety of funding sources for these broad programs include, but are not limited to, the following:

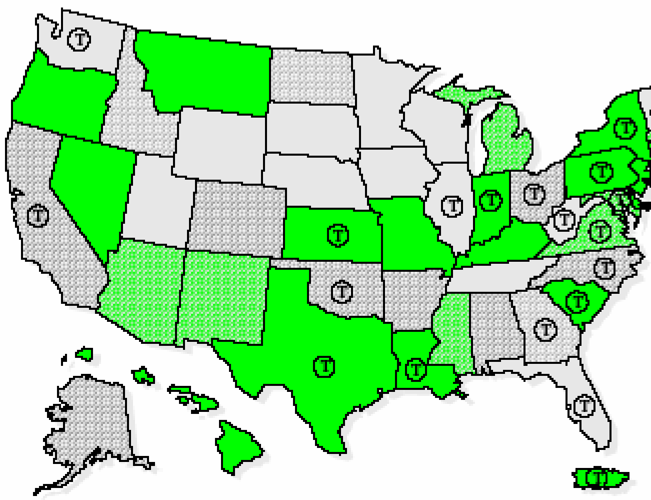
- General Obligation Bonds
- State General Fund Revenues
- Toll Revenues
- Toll Revenue Bonds
- State Motor Fuel Taxes
- State Motor Fuel Tax Bonds
- Highway User Fees and Bonds
- Federal Gas Taxes
- GARVEE Bonds
- Personal Income Taxes and Bonds
- Vehicle License and Registration Fees
- Vehicle L&R Fee Bonds
- Local Option Gas Taxes and Bonds
- Sales Taxes and Sales Tax Bonds

In the chart below, we have summarized how the states fund their highway transportation programs. We have coded the map to distinguish among the following features: 1) States that fund Pay-as-You-Go via their General Fund and/or with General Obligation Bonds, 2) States that issue some form of transportation-revenue bonds through their respective Department of Transportation, 3) States that issue GARVEEs, and 4) States (or State agencies) that issue Toll Revenue Bonds.

- "DOT" Revenue Bonds: These States (listed in the table below) issue dedicated highway revenue bonds secured by highway user fees or taxes, and do not carry the G.O. security of the State. Typically, these bonds are sold with final maturities that range from 15 to 25 years and carry credit ratings that range from the A-category to the strong AA-category. These bonds are not secured by Federal Highway Reimbursements.

- G.O, Other Bonds, and/or PAYGO: These States fund transportation needs from General Obligation bonds that carry the full faith and credit of the State and/or Pay-As-You-Go funding, or other bonds. Maine falls in this category as it issues bonds for the Highway Program, but these bonds are secured by the State's G.O., although paid from highway funds.

- "GARVEEs": These States issue GARVEE bonds either secured solely by Federal Highway Reimbursements or back stopped with other dedicated revenues of the State.



Note: North Carolina to issue GARVEEs in 2006; NC Turnpike Authority created but not yet collecting tolls; Idaho, Georgia and Maryland expect to issue new GARVEEs in 2006.

DOT Revenue Bonds and Conduit Issuers

The table below lists those States that issue highway revenue bonds either by their respective DOTs, the State, or a conduit issuer. A conduit issuer is a third party, such as a municipal bond bank, who issues bonds on behalf of the State. These bonding programs are paid and secured by dedicated highway revenues of the State and not by the State's full faith and credit.

Gas and Other Highway User Tax Bond Programs	
Arizona Transportation Board	Highway Revenue Bonds
Commonwealth of Massachusetts	Special Obligation Revenue Bonds
Commonwealth of Virginia	Transportation Revenue Bonds
Delaware Transportation Authority	Transportation System Revenue Bonds
Indiana Transportation Finance Authority	Highway Revenue Bonds
Kentucky Turnpike Authority	Economic Development Road Revenue Bonds
Missouri Highways and Transportation Commission	State Road Bonds
New York State Thruway Authority	Highway and Bridge Trust Fund Bonds
Pennsylvania Turnpike Commission	Oil Franchise Tax Revenue Bonds
Puerto Rico Highway and Transportation Authority	Transportation Revenue Bonds
Rhode Island Economic Dev. Corporation	Motor Fuel Tax Revenue Bonds
State of Connecticut	Special Obligation Bonds
State of Hawaii DOT	Highway Revenue Bonds
State of Kansas DOT	Highway Revenue Bonds
State of Louisiana	Gasoline and Fuel Tax Revenue Bonds
State of Maryland DOT	Consolidated Transportation Bonds
State of Michigan	Comprehensive Transportation Revenue Bonds
State of Michigan	State Trunk Line Fund Bonds
State of Mississippi	Highway Revenue Bonds (Four-Lane Highway Program)
State of Montana DOT	Highway Revenue Bonds
State of Nevada	Highway Improvement Revenue Bonds
State of New Jersey Transportation Trust Fund	Revenue Bonds
State of New Mexico	Revenue Highway Bonds
State of Oregon DOT	Highway User Tax Revenue Bonds

Below we highlight a sample of dedicated highway revenue bonding programs:

Connecticut (Special Tax Obligation Program) -- While Connecticut has been able to lower its gas tax rate significantly since its high of 38¢ in 1997, it remains the 8th highest in the nation at 25¢, 5¢ above the national average. Pledged revenues include Motor Fuels Tax, Motor Vehicle Receipts, Licenses, Permits and Fees, and Sales Tax. The State covenants to raise pledged revenues sufficient to maintain 2.0x debt service coverage. Total outstanding debt equals $3.1 billion and current debt service coverage equals 2.60x for the senior lien and 2.30x for the subordinate lien. Annual debt service fluctuates from a low of $35 million to a high of $414 million.

Kansas (Kansas DOT Highway Revenue Bonds) –The State has covenanted to provide annual revenues to the State Highway Fund at least equal to three times annual debt service. The State Highway Fund includes a portion of the Motor Fuel Tax, Sales and Use Tax and Vehicle Registration and License Fees. Total outstanding debt equals $1.5 billion and the current debt service coverage level is 5.37x. This means that Kansas dedicates almost 20% of their highway user fees toward debt service payments annually.

Commonwealth of Massachusetts (Special Obligation Revenue Bonds) – Massachusetts currently levies a gasoline tax of 21¢ per gallon, of which 6.86¢ is available for bond debt service and the Commonwealth covenants not to divert or reduce receipts. Total outstanding debt equals $574.8 million and the current debt service coverage is 3.19x.

New York State Thruway Authority (Highway and Bridge Trust Fund Bonds) – Cooperative Agreement Payments made by the State to the Authority from funds in the Dedicated Highway and Bridge Trust Fund. The Fund comprises the Petroleum Business Tax, Motor Fuel Tax, Highway Use Tax and Motor Vehicle Registration Fees. Total outstanding debt equals $5.5 billion and the current debt service coverage is 3.19x. Annual debt service ranges from a low of $43 million to a high of $722 million.

Rhode Island (Gas Tax Bonds) -- Under the State's Motor Fuel Tax Act, 2¢ of the 30¢-per-gallon Motor Fuel Tax are pledged for bond debt service of motor fuel tax revenue bonds. These bonds are issued through the Rhode Island Economic Development Corporation, as a conduit borrower for the DOT and represent the State's match of the GARVEE program. Total issuance is expected to be $42.8 million with annual debt service of between $3 and $5 million, representing approximately 7% of the annual motor fuel tax revenue.

<u>Maine by Comparison</u>

Similar to other States, Maine relies on multiple sources to meet the demands of funding highway-related needs: These include 1) pay-as-you go funding from the State's General Fund (which includes state motor fuel taxes), 2) issuing General Obligation Bonds for its Highway Program, 3) issuing GARVEE bonds for specific project needs, and 4) relying on the Maine Turnpike Authority for over 109 miles of operations, maintenance, preservation and major highway funding requirements.

General Obligation Bonds

Maine's "5% Rule" on GO Bonds: The State issues General Obligation Bonds within the framework of a 5% Rule, which has been in place since 1999 and says that no more than 5% of annual general fund revenues may be allocated to GO debt service payments. The "rule" of a 5% standard is a policy measure not a constitutional mandated threshold. State bonding can expand to any amount agreed upon by 2/3 of both House and Senate and approved by the Governor and the voters. For many years Maine bonded under a 7% rule and later under a "90% rule" which allowed no more than 90% of retiring debt to be rolled over to new bonds.

GARVEEs

Background: In the 2004 Session, the Maine Legislature approved GARVEE bonds as a new tool to fund certain elements of the state's transportation program. Maine joined 19 other States that have implemented GARVEEs with a collective bond issuance of over $9.7 billion in par amount to fund transportation needs. Below we provide a list, ranked by largest GARVEE issuer, of the states that have issued GARVEEs since 1998. Noted below are the new GARVEE States of Idaho, Maryland and North Carolina who expect to issue over $1billion collectively of GARVEE bonds in 2006.

GARVEE Issuer	Par issued in $millions
Massachusetts	$1,907.34
Colorado	1,739.19
New Jersey (Transit)	1,336.25
Virginia	898.32
California	614.85
Michigan	600.00
Arkansas	575.00
Maryland (2006)	400.00
North Carolina (2006)	400.00
Idaho (2006)	350.00
Arizona	338.77
Ohio	305.00
Rhode Island	216.81
Alabama	200.00
Mississippi	200.00
Puerto Rico	139.87
Kentucky	139.64
Montana	122.80
New Mexico	118.77
Alaska	102.81
Oklahoma	96.46
Maine	48.40
US Virgin Islands	20.85

Expanding Maine's GARVEE program?

Evidenced above, Maine's GARVEE program is quite modest in size versus other states that have implemented similar programs. Any expansion of the State's GARVEE program would allow for incremental funding capacity for transportation projects. And while the issuance of new GARVEE bonds would of course mean taking on additional debt, the cost of the new debt would have to be measured against the State's ability to help close a current transportation funding gap by delivering projects over the near term. The alternative otherwise is for projects to be delayed, downsized, or re-programmed with the State's Transportation Improvement Plan. Delay would translate into higher overall costs given the current high inflationary impact of steel, concrete, and other construction materials. In evaluating the expanded use of GARVEEs, the State should consider 1) minimizing the impact of additional debt on the cash-funding of projects in the current STIP, and 2) better matching the term of the debt with the generally long useful lives of the projects that can be funded with GARVEEs.

Maine's GARVEE bonds are secured solely by the future receipt of federal transportation funds and do not have any backstop security of other State revenue sources or the full faith and credit of the State. The GARVEEs were legislatively approved *only* to fund portions of the Waldo-Hancock Bridge, with a bonding amount of GARVEEs not to exceed $50 million. Unlike other states, this authorizing statute is limiting as does not allow future GARVEEs to be issued without future approval of the Legislature. Other states chose to either approve GARVEEs for a basket of projects, a broader program, and/or a not-to-exceed par amount that ranged from several hundred million to over a billion dollar in bonding capacity. While not legislatively mandated, Maine also chose to restrict the final maturity of the 2004 GARVEE bonds to 2015, representing an 11-year term of the debt. However, such a short-term debt repayment cycle seems inconsistent with a capital asset that has a useful life of 50 years. This was a ratings based decision, since states that issue beyond 12-year GARVEEs typically fall below AA-category ratings which was a structuring goal of the State.

Adding additional debt service to a relatively short final maturity structure would keep within the ratings parameters of the current AA ratings, but would otherwise cannibalize monies programmed for pay-as-you-go needs. To relieve this added debt burden, the State could issue a subordinate tranche of GARVEEs that extended 15 to 25 years. While these bonds would carry a lower rating (likely in the low A-category), annual debt service would be reduced, thereby allowing for greater near-term PAYGO funding. The table below highlights the annual debt service costs for an assumed $100 million transaction assuming a 15, 20, 25 and 30 year final maturity.

	15-Year Final Maturity	20-Year Final Maturity	25-Year Final Maturity	30-Year Final Maturity
Annual Debt Service	$10.6 million	$8.5 million	$7.4 million	$6.7 million

Federal Funding Levels: In August 2005, SAFETEA-LU, the new federal reauthorization of the Surface Transportation Program, was approved and funding levels were authorized through 2009. Maine is expected receive a 30% increase in overall federal transportation dollars (vs. TEA-21), with an average annual apportionment of $190 million ($980 million over 5 years). Of this amount, approximately $199 million is allocated to the High Priority Project Program ("earmarks").

While the State's total apportionment is the full $980 million, historically, States have received 88 percent of the total funding level. Therefore, for planning purposes, it is assumed that the State will in fact receive $862 million, $175 million of which will be used for "earmarks." This would leave approximately $687 million of unencumbered federal funds to be used by the State. Thus, the net effect of Maine having the highest "earmarking" levels of any State, is a reduction in the amount of flexibility and absolute federal dollars to spend on other State transportation projects. Herein lies a significant part of the current cashflow problem that we are attempting to correct at the State level.

While these increased dollars will be programmed for use within the State's STIP, they also represent an increased source of bonding capacity for GARVEEs. As the pledged revenue source for the GARVEE bonds, the increased federal highway funds serve to strengthen the underlying GARVEE credit and add to overall debt capacity, notwithstanding the need for future State legislative approval.

Structuring Issues and Impacts: As mentioned earlier, when considering future GARVEEs, any State should evaluate debt structuring goals to balance the impact of additional debt loading versus programmatic funding requirements of the STIP. Also, the State will again be required to match the non-federal portion of any new bond-funded projects. This State Match can be satisfied upfront or over time as an annual state match to debt service.

Below, we address the financial impact of issuing a hypothetical $100 million in new GARVEE bonds. To dampen the near-term impact of this new debt service, we assume the term of the new bonds is extended to 15-years (from the current 11 years), which lowers annual debt service requirements. Further, principal retirement is assumed to be deferred at least two years to again address any concerns of already obligated near-term federal dollars. The use of capitalized interest can also be helpful in smoothing any additional programmatic restrictions. In the table below we gauge the impact of adding an additional $100 million of new GARVEE bonds, as it would affect debt service and monies otherwise available for pay-as-you funding for DOT's highway program. As you can see, with the combination of increased federal funds and a longer debt structure, the State can fund $100 million of new bonds and still project significant federal funds available for PAYGO funding.

	Assuming TEA-21 Funding Levels	2004 Bonds' Debt Service	Federal Funds after Debt Service	Assuming SAFETEA-LU Funding Levels (1)	2004 Bonds & Hypothetical 2006 Bonds' ($100 mm) Debt Service	Federal Funds after Debt Service
2007	$150,000	$5,585	$144,415	$190,000	$10,600	$179,400
2008	150,000	5,585	144,415	190,000	10,600	179,400
2009	150,000	5,585	144,415	190,000	16,230	173,770
2010	150,000	5,585	144,415	190,000	16,230	173,770
2011	150,000	5,585	144,415	190,000	16,230	173,770
2012	150,000	5,585	144,415	190,000	16,230	173,770
2013	150,000	5,585	144,415	190,000	16,230	173,770
2014	150,000	5,585	144,415	190,000	16,230	173,770
2015	150,000	5,585	144,415	190,000	16,230	173,770
2016				190,000	10,645	179,355
2017				190,000	10,645	179,355
2018				190,000	10,645	179,355
2019				190,000	10,645	179,355
2020				190,000	10,645	179,355
2021				190,000	10,645	179,355

(1) Preliminary and based upon average annual apportionment before earmarking. No based upon historical receipts, which are 88 percent of total.

Comparative Statistics

Gas Taxes: For comparative purposes, the following table details the per gallon motor fuel taxes for New England and Northeast states. It shows that Maine is one of the higher states on a relative basis to neighboring states and high versus the national average of 20 cents per gallon. As noted, Maine is unique versus most other States, having its gas tax pegged to an inflation index (CPI) that adjusts annually.

State	Gasoline Tax (cents per gallon)
Rhode Island	31.0
Maine*	25.2
Connecticut	25.0
New York	23.2
Massachusetts	21.0
Vermont	20.0
New Hampshire	19.5

** Maine is the only state with a gas tax pegged to a specific inflation index that is adjusted annually. Other states have variable tax rates adjusted quarterly (KY, NE) or annually (FL, IA, NY, PA, WV, WI)*

Debt Medians: Another measurement to consider is how Maine is positioned compared to other states as it concerns overall state debt load. In May 2005, Moody's published its "2005 State Debt Medians" which is an annual analysis of state debt medians, based on two measures of state debt burden: 1) debt per capita and 2) debt as a percentage of personal income. Each median is based on the analysis of municipal obligations issued by each state and supported by the tax base, and are the debt burden measures most commonly used by municipal analysts. It should be noted that debt burden is one of numerous factors that Moody's uses in determining a State's credit quality and bond rating. In the table below, we have excerpted various statistics and rankings from the Moody's report for comparative review:

State	ME	VT	NH	MA	CT	RI	NY
Moody's Rating	Aa2	Aa1	Aa2	Aa2	Aa3	Aa3	A1
Net Tax-Supported Debt Per Capita	$634	$716	$457	$3,372	$3,614	$1,373	$2,593
Rank (#)	30	25	37	2	1	10	5
Net Tax-Supported as % of Personal Income	2.2%	2.3%	1.3%	8.5%	8.5%	4.3%	7.2%
Rank (#)	30	27	39	2	3	15	5
Total Net Tax Supported Debt ($ millions)	$835	$445	$594	$21,638	$12,662	$1,485	$49,864
Rank (#)	40	43	42	5	7	35	2

Conclusion

The State of Maine has been conservative in its borrowing for transportation-related projects having issued very little debt and keeping the final maturity of this debt relatively short in nature. Moreover, the transportation-related debt that has been issued to date has been done on General Obligation basis, with the exception of the GARVEE bonds issued in 2004, which were issued through a conduit or third party issuer (Maine Municipal Bond Bank). The statutory limits placed on the State with regard to debt issuance and the lower annual debt service costs incurred from a longer final maturity seem to indicate that the issuance of bonds through a conduit issuer may be appropriate for the State to consider.